

**Savannah River Site
Citizens Advisory Board**

**Recommendation # 280
Concern for Receipt and Planning for Disposition of Research Reactor
Spent Nuclear Fuel at SRS**

Background

Savannah River Site (SRS) has the mission for receiving spent fuel from foreign and domestic research reactors and this has been an on-going program since the 1960s. Receipt of Research Reactor Spent Nuclear Fuel (RRSNF) from foreign sources is planned to continue until 2019 and the receipt of domestic spent nuclear fuel could continue until 2019 or even later. The Citizens Advisory Board (CAB) supported this program and felt that receipt of such fuels is a positive contribution to the Site's missions and the nation's nonproliferation goals where there was a defined disposal path.

The receipt of RRSNF at the Site has many advantages. This approach takes vulnerable materials from locations where security may not be adequate and moves the materials to a highly-safeguarded setting. Further, processed highly enriched uranium could be recovered and prepared for reuse in the US private power reactors. However, measures presently being taken by the Department of Energy (DOE) may preclude the ability of SRS to safely and effectively process RRSNF for disposition. DOE has directed Savannah River Nuclear Solutions (SRNS) to reduce the operational status of H-Canyon from full operations to a non-operational standby condition as follows. The Letters of Direction regarding H-Canyon indicate that DOE-SR has directed SRNS to perform periodic "cold runs" in order to exercise equipment and maintain a minimum qualified crew until processing decisions regarding RRSNF has been determined. This action may essentially remove from consideration the most promising and capable means for processing RRSNF, which was processing through the H-Canyon Purex process. While the NEPA process was still active on which nuclear materials would be processed through H-Canyon, the H-Canyon processing option for the RRSNF disposition was considered to be the most likely measure by far.

Comments

With this direction to SRNS the manner in which DOE is handling the RRSNF disposition seems inconsistent and disjointed. Since the late 1990s, DOE has been on a massive program to clean up the SRS. DOE is spending in excess of \$1 billion on cleanup annually and was provided approximately \$1.5 billion in addition to the normal Site budget from the recent American Recovery and Reinvestment Act (ARRA). DOE has worked tirelessly to reduce the "Site Cleanup Footprint," expedited the schedule for waste tank cleanup and liquid waste processing, and placed emphasis on early cleanup in every aspect of Site operations.

Now, DOE is taking this very important program and storing the shipment receipts with no known disposition path. Planning seems at this point to be of lesser importance.

The CAB feels that DOE should take measures to clear up their position on this issue. DOE should make their plans widely known to the general public. This recommendation addresses the receipt of RRSNF with no known disposition path established or planned.

Recommendations: The SRS Citizens Advisory Board recommends that DOE:

1. Establish a rationale (to be widely publicized) for the concept of receiving RRSNF with no known disposition path describing future plans and commitments for disposition planning.
2. Indicate when a realistic planning case for the disposition of RRSNF will be developed.
3. Present such a plan in a System Plan indicating interfaces with other related programs at SRS such as the liquid waste management plan.